Status of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Previously Presented) A method, comprising:

receiving an instruction to adjust an output power of a power amplifier;

powering on or off at least one branch of the power amplifier according to the received instruction to enable a logarithmic change in the output power of the power amplifier; and

amplifying a signal according to the adjusted output power,

wherein the instruction specifies at least one of a percentage change in power and a decibel (dB) change in power.

2. (Original) The method of claim 1, further comprising transmitting the amplified signal.

3-4. (Cancelled).

5. (Previously Presented) The method of claim 1, wherein the powering on or off of a branch changes the output power of the power amplifier linearly in dB.

6. (Previously Presented) The method of claim 1, wherein thermometer coded power control words are used to power on and off branches of the power amplifier.

7. (Original) The method of claim 6, wherein the thermometer coded power control words ensure monotonic power control.

8. (Previously Presented) A system, comprising:

means for receiving an instruction to adjust an output power of a power amplifier;

means for powering on or off at least one branch of the power amplifier according to the received instruction to enable a logarithmic change in output power; and

means for amplifying a signal according to the adjusted output power,

wherein the instruction specifies at least one of a percentage change in power and a decibel (dB) change in power.

9. (Previously Presented) A system, comprising:

a receiving engine capable of receiving an instruction to adjust an output power of a power amplifier; and

a determining engine, communicatively coupled to the receiving engine, capable of determining how many branches of a power amplifier to power on or off according to the received instruction to enable a logarithmic change in output power; and

a power amplifier engine, communicatively coupled to the determining engine and the power amplifier, capable of transmitting the determination to the power amplifier,

wherein the instruction specifies at least one of a percentage change in power and a decibel (dB) change in power.

10-11. (Cancelled).

12. (Previously Presented) The system of claim 9, wherein powering on or off a branch changes the output power of the differential power amplifier linearly in dB.

13. (Previously Presented) The system of claim 9, wherein the power amplifier engine uses thermometer coded power control words to power on and off branches of the amplifier.

14. (Original) The system of claim 13, wherein the thermometer coded power control words ensure monotonic power control.

15. (Previously Presented) A power amplifier, comprising:

a plurality of branches for controlling transistors; and

a plurality of transistors, each transistor begin communicatively coupled to a branch of the plurality of branches,

wherein the plurality of transistors are arranged in a logarithmic scale, thereby enabling a logarithmic change in output power with the powering on or off of a transistor.

16. (Previously Presented) The differential power amplifier of claim 15, wherein the powering on or off of a branch in the plurality of branches changes the output power of the power amplifier linearly in decibel.

17. (Previously Presented) A transmitter comprising a power amplifier according to claim 15.